

What is claimed is:

1. A method for displaying signal strengths of each channel of a digital broadcast receiver, comprising:

5 sequentially scanning channels for digital broadcast signals from a tuner receiving the digital broadcast signals; and

displaying channel numbers of the scanned channels, the number of channels, signal strengths of each channel, and sum of the signal strengths of the entire channels in an OSD (On Screen Display) form.

10

2. The method for displaying signal strengths of claim 1 further comprising:

storing the sequentially scanned channel information and signal strengths of each channel.

15

3. The method for displaying signal strengths of claim 1, wherein the channel numbers of the scanned channels, the number of channels, signal strengths of each channel, and sum of the signal strengths of the entire channels for the searched channels are outputted as a voice.

20

4. The method for displaying signal strengths of claim 1, wherein, in the channel scanning, signal strengths of every channel are displayed in the OSD form through an auto channel scanning.

25

5. The method for displaying signal strengths of claim 1, wherein the

signal strengths of each channel are displayed in picture and numerals.

6. The method for displaying signal strengths of claim 1, wherein the broadcast signal received through the tuner includes audio, video and PSIP
5 (program and System Information Protocol) data.

7. A method for displaying signal strengths of each channel of a digital broadcast receiver, comprising:

sequentially scanning channels for broadcast signals from a tuner
10 receiving broadcast signals;

storing the sequentially scanned channel information and signal strengths of each channel;

sequentially outputting the sequentially scanned channel information and signal strengths of each channel to a screen;

15 determining whether the scanned channel is a final channel, and repeatedly performing the series of steps as described above if the scanned channel is not the final channel; and

determining whether the scanned channel is the final channel, and outputting the number of channels scanned through the channel scanning step
20 and the sum of signal strengths in an OSD form on the screen.

8. The method for displaying signal strengths of claim 7, wherein, in the step of outputting in the OSD form, channel numbers, the number of channels, signal strengths of each channel and the sum of signal strengths of the entire
25 channels for the scanned channels are outputted as a picture, a numeral or a

voice.

9. An apparatus for displaying signal strengths of each channel of a digital broadcast receiver comprising:

5 a signal strength searching unit for searching a signal strength of a channel for a broadcast signal being currently tuned;

a decoding unit for outputting a value of the signal strength searched by the signal strength searching unit as a video signal; and

10 a microcomputer for controlling the decoding unit to display a signal strength of a channel according to the signal strength searched by the signal strength searching unit on a screen.

10. The apparatus for displaying signal strengths of claim 9 further comprising:

15 a signal strength storing unit for storing the signal strength values searched by the signal strength searching unit; and

a video display processor for converting the video signal outputted from the decoding unit to such a suitable form as to be outputted to a screen.

20 11. The apparatus for displaying signal strengths of claim 9 further comprising:

a tuner unit for receiving a digital broadcast signal and outputting it in a transmission stream form;

25 a demodulator for decoding the transmission stream received through the tuner and correcting an error; and

a demultiplexing unit for extracting audio, video, additional data and the like from the transmission stream received through the demodulator.

12. The apparatus for displaying signal strengths of claim 11, wherein
5 the decoding unit decodes the audio, video and additional data extracted by the demultiplexing unit to output an audio, video and additional data signal, and outputs signal strength values searched by the signal strength searching unit as a video signal.

10 13. The apparatus for displaying signal strengths of claim 12, wherein the microcomputer controls the decoding unit to output channel numbers, the number of channels, signal strengths of each channel, and the sum of signal strengths of the entire channels as a voice.

15 14. The apparatus for displaying signal strengths of claim 11, wherein the decoding unit comprises:

a video decoder for decoding the video data extracted by the demultiplexing unit and outputting a video signal;

20 an audio decoder for decoding the audio data extracted by the demultiplexing unit and outputting an audio signal; and

a PSI/PSIP decoder for decoding the additional data extracted by the demultiplexing unit and outputting an additional data signal.

15. The apparatus for displaying signal strengths of claim 9, wherein
25 the microcomputer searches a user's desired signal strength from the signal

strength searching unit and controls the searched signal so as to be displayed on the screen.

16. The apparatus for displaying signal strengths of claim 15, wherein
5 the microcomputer displays the channel numbers, the number of channels, signal strengths of each channel, and the sum of signal strengths of the entire channels.

17. An apparatus for displaying signal strengths of each channel of a digital broadcast receiver comprising:

10 a tuner unit for receiving a digital broadcast signal and outputting it in a transmission stream form;

a demodulator for decoding the transmission stream received through the tuner and correcting an error;

15 a signal strength searching unit for searching a signal strength of a channel being currently tuned by the tuner unit;

a signal strength storing unit for storing the signal strength value searched by the signal strength searching unit;

a demultiplexing unit for extracting audio, video, additional data or the like from the transmission stream received through the demodulator;

20 a decoding unit for decoding the audio, video and additional data extracted by the demultiplexing unit to output an audio, video and additional data signal, and outputting the signal strength value searched by the signal strength searching unit as a video signal;

25 a video display processor (VDP) for converting the video signal outputted from the decoding unit to such a suitable form as to be outputted to a screen; and

a microcomputer for controlling the decoding unit to search a user's desired signal strength from the signal strength searching unit and outputting a signal strength of a channel according to the searched signal strength.

5 18. The apparatus for displaying signal strengths of claim 17, wherein the decoding unit comprises:

a video decoder for decoding the video data extracted by the demultiplexing unit and outputting a video signal;

10 an audio decoder for decoding the audio data extracted by the demultiplexing unit and outputting an audio signal; and

 a PSI/PSIP decoder for decoding the additional data extracted by the demultiplexing unit and outputting an additional data signal.

15 19. The apparatus for displaying signal strengths of claim 17, wherein the microcomputer controls the decoding unit to output the channel numbers, the number of channels, signal strengths of each channel, and the sum of signal strengths of the entire channels, as a voice.

20 20. The apparatus for displaying signal strengths of claim 17, wherein the microcomputer controls the decoding unit to display the channel numbers, the number of channels, signal strengths of each channel, and the sum of signal strengths of the entire channels, in an OSD form on a screen.